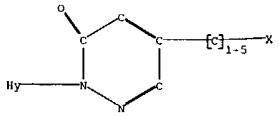
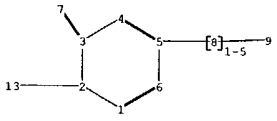
C:\Program Files\Stnexp\Queries\10773231.str

Part I





chain nodes :
7 8 9 13
ring nodes :
1 2 3 4 5 6
chain bonds :
2-13 3-7 5-8 8-9
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact/norm bonds :
1-2 1-6 2-3 2-13 3-4 3-7 4-5 5-6
exact bonds :
5-8 8-9
isolated ring systems :
containing 1 :

G1:O,S,N

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 13:Atom
Generic attributes :
13:
Number of Carbon Atoms : 7 or more
Type of Ring System : Polycyclic

[redacted]

file reg
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 11:17:15 ON 12 JUL 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 11 JUL 2004 HIGHEST RN 708207-86-7
DICTIONARY FILE UPDATES: 11 JUL 2004 HIGHEST RN 708207-86-7

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading C:\Program Files\Stnexp\Queries\10773231.str

L1 STRUCTURE UPLOADED

=> s l1
SAMPLE SEARCH INITIATED 11:17:32 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 127 TO ITERATE

100.0% PROCESSED 127 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1864 TO 3216
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 sss full
FULL SEARCH INITIATED 11:17:58 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2277 TO ITERATE

100.0% PROCESSED 2277 ITERATIONS 21 ANSWERS
SEARCH TIME: 00.00.01

L3 21 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS

	SINCE FILE ENTRY	TOTAL SESSION

[redacted]

FULL ESTIMATED COST 155.42 155.63

FILE 'CAPLUS' ENTERED AT 11:18:03 ON 12 JUL 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE COVERS 1907 - 12 Jul 2004 VOL 141 ISS 3
FILE LAST UPDATED: 11 Jul 2004 (20040711/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3
L4 5 L3

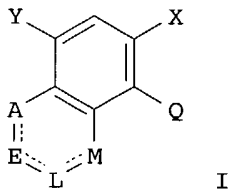
=> d l4 1-5 bib abs hitstr

L4 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:429093 CAPLUS
DN 139:6880
TI Preparation of benzoxazines, benzoxazoles, and related compounds as herbicides.
IN Tsukamoto, Masamitsu; Gupta, Sandeep; Wu, Shao-Yong; Ying, Bai-Ping; Pulman, David A.
PA Ishihara Sangyo Kaisha, Ltd., Japan
SO U.S., 28 pp., Cont.-in-part of U.S. Ser. No. 149,296, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6573218	B1	20030603	US 2001-786816	20010705
	WO 2000013508	A1	20000316	WO 1999-US18836	19990903
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	US 2004029734	A1	20040212	US 2002-301799	20021122
PRAI	US 1998-149296	B2	19980909		
	WO 1999-US18836	W	19990903		

[redacted]

US 2001-786816 A3 20010705
OS MARPAT 139:6880
GI



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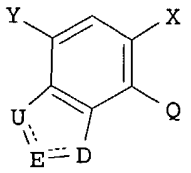


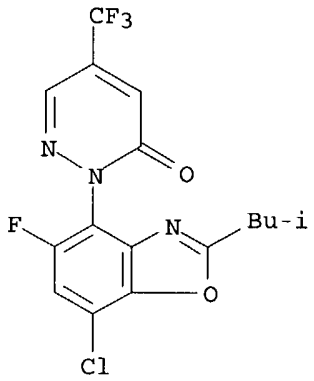
II

AB Title compds. [I, II; X, Y = H, halo, cyano, nitro, alkyl, alkoxy, haloalkyl, haloalkoxy; A = O, N, NR1, CR3, CR3R4, SOn, CO, CS, CNR1; D = N, NR2; M = CR5, CR5R6, N, NR2, SOn, CO, CS, CNR2; When A = O, M = N, NR2, SOn, CO, CS, CNR2; E, L = CR7, CR8, CR7R8, O, N, NR7, SOn, CO, CS, CNR7, CNR7R8; U = CR9, O, N, NR2, S(O)n, CO, CS, CNR2; when U = CR9, E = N; R1, R2 = H, (substituted) alkyl, alkenyl, alkynyl, alkylcarbonyl, cycloalkylcarbonyl, haloalkylcarbonyl, alkoxycarbonyl, arylcarbonyl heteroarylcarbonyl; Q = specified azolyl, azinyl; R3-R9 = H, halo, OH, SH, amino, cyano, NO2, (substituted) alkyl, haloalkyl, alkoxy, haloalkoxy, alkoxyalkyl, alkynyl, alkenyl, aryl, heteroaryl, aryloxy, heteroaryloxy, cycloalkyl, cyclocarbonyl, carboxy, alkylcarbonyl, arylcarbonyl, haloalkylcarbonyl, alkylcarbonyloxy, haloalkylcarbonyloxy, alkoxycarbonyl, haloalkoxycarbonyl, alkylthiocarbonyl, haloalkylthiocarbonyl, alkoxythiocarbonyl, haloalkoxythiocarbonyl, alkylamino, arylsulfonylamino, arylamino, alkylthio, arylthio, alkenylthio, alkynylthio, alkylsulfinyl, alkenylsulfinyl, alkynylsulfinyl, alkylsulfonyl, alkenylsulfonyl, alkynylsulfonyl, arylsulfonyl; n = 0-2], were prepared Thus, 4-chloro-3-(2-amino-4-chloro-6-fluoro-3-hydroxyphenyl)-5-difluoromethoxy-1-methyl-1H-pyrazole (preparation given), Et 2-bromopropionate, and K2CO3 were stirred in MeCN overnight to afford 4-chloro-3-(8-chloro-6-fluoro-2-methyl-2H-1,4-benzoxazin-3-on-5-yl)-5-difluoromethoxy-1-methyl-1H-pyrazole. The latter at 250 g/ha postemergent gave 100% control of Amaranthus retroflexus.

IT **535980-41-7P**
RL: AGR (Agricultural use); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of benzoxazines, benzoxazoles, and related compds. as herbicides)

RN 535980-41-7 CAPLUS
CN 3(2H)-Pyridazinone, 2-[7-chloro-5-fluoro-2-(2-methylpropyl)-4-benzoxazolyl]-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

[redacted]



RE.CNT 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:137211 CAPLUS
DN 134:178546
TI Preparation of heterocyclylbenzoxazoles as herbicides.
IN Reinhard, Robert; Hamprecht, Gerhard; Menke, Olaf; Puhl, Michael; Sagasser, Ingo; Zagar, Cyrill; Otten, Martina; Westphalen, Karl-Otto; Walter, Helmut
PA BASF Aktiengesellschaft, Germany
SO PCT Int. Appl., 78 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001012625	A2	20010222	WO 2000-EP7803	20000810
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	EP 1200428	A1	20020502	EP 2000-958421	20000810
	EP 1200428	B1	20030416		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	JP 2003507377	T2	20030225	JP 2001-517523	20000810
PRAI	DE 1999-19938073	A	19990812		
	WO 2000-EP7803	W	20000810		

OS MARPAT 134:178546
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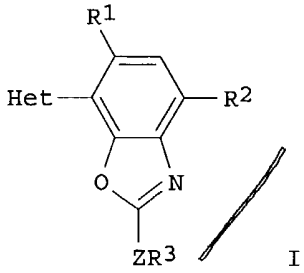


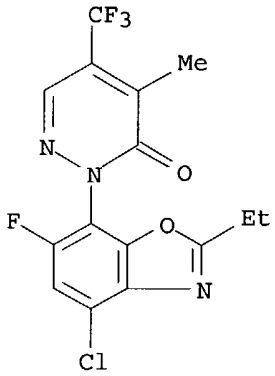
I

AB Title compds. [I; Z = bond, O, S; R1 = H, halo; R2 = halo, cyano, alkyl, haloalkyl, alkoxy, haloalkoxy; R3 = alkyl, haloalkyl, hydroxyalkyl, cyanoalkyl, alkoxyalkyl, haloalkoxyalkyl, alkenyloxyalkyl, alkynyloxyalkyl, cycloalkoxyalkyl, aminoalkyl, carboxyalkyl, (substituted) Ph, phenylalkyl, etc.; Het = unsatd. N-bonded (substituted) 5-6 membered heterocyclyl], were prepared Thus, crude 3-(5-amino-4-chloro-2-fluoro-6-hydroxyphenyl)-5-(1,1-dimethylethyl)-1,3,4-oxadiazol-2(3H)-one (preparation given) and tri-Me orthoformate were refluxed 5.5 h in EtOH to give 3-(4-chloro-6-fluorobenzoxazol-7-yl)-5-(1,1-dimethylethyl)-1,3,4-oxadiazol-2(3H)-one. Several I were said to give very good postemergent herbicidal activity against velvetleaf, lady's thumb, and redroot pigweed.

IT **326802-79-3P 326802-80-6P 326802-81-7P**
326802-82-8P 326802-83-9P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of heterocyclylbenzoxazoles as herbicides)

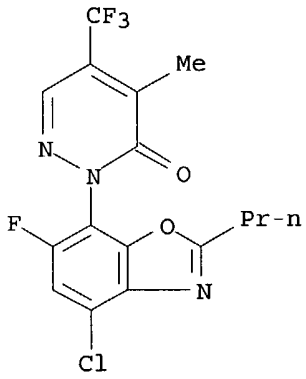
RN 326802-79-3 CAPLUS

CN 3(2H)-Pyridazinone, 2-(4-chloro-2-ethyl-6-fluoro-7-benzoxazolyl)-4-methyl-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

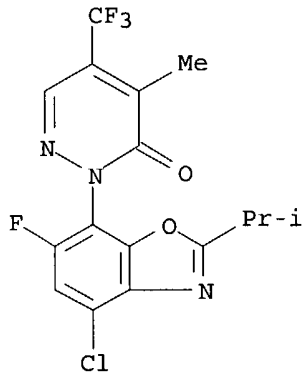


RN 326802-80-6 CAPLUS

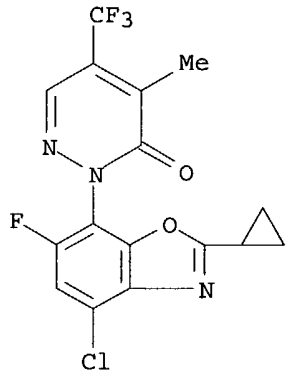
CN 3(2H)-Pyridazinone, 2-(4-chloro-6-fluoro-2-propyl-7-benzoxazolyl)-4-methyl-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 326802-81-7 CAPLUS
CN 3(2H)-Pyridazinone, 2-[4-chloro-6-fluoro-2-(1-methylethyl)-7-benzoxazolyl]-4-methyl-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 326802-82-8 CAPLUS
CN 3(2H)-Pyridazinone, 2-(4-chloro-2-cyclopropyl-6-fluoro-7-benzoxazolyl)-4-methyl-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 326802-83-9 CAPLUS
CN 3(2H)-Pyridazinone, 2-[4-chloro-2-(cyclopropylmethyl)-6-fluoro-7-benzoxazolyl]-4-methyl-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

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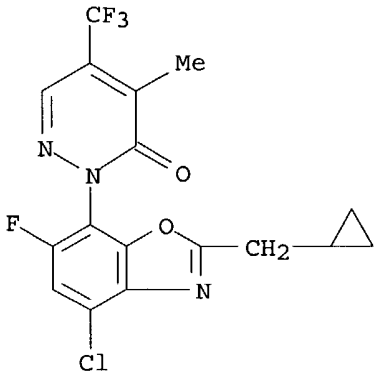

L4 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2001:115144 CAPLUS
DN 134:163055
TI Preparation of heterocyclylchromenes as herbicides.
IN Linker, Karl-Heinz; Andree, Roland; Reubke, Karl-Julius; Schallner, Otto; Drewes, Mark-Wilhelm; Dahmen, Peter; Feucht, Dieter; Pontzen, Rolf
PA Bayer Aktiengesellschaft, Germany
SO PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001010861	A2	20010215	WO 2000-EP7263	20000728
	WO 2001010861	A3	20010907		
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	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	DE 19937772	A1	20010215	DE 1999-19937772	19990810
	BR 2000013084	A	20020423	BR 2000-13084	20000728
	EP 1208098	A2	20020529	EP 2000-956324	20000728
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	JP 2003506448	T2	20030218	JP 2001-515670	20000728
	US 6573219	B1	20030603	US 2002-49189	20020205
PRAI	DE 1999-19937772	A	19990810		
	WO 2000-EP7263	W	20000728		

OS MARPAT 134:163055
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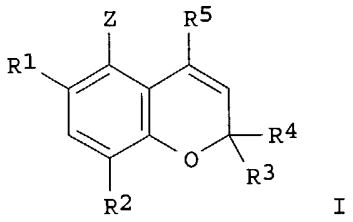


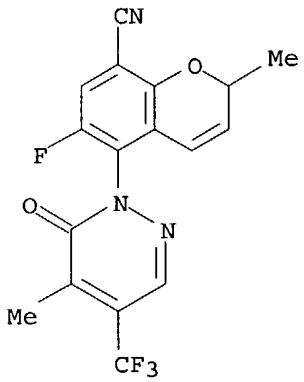
I

AB Title compds. [I; R1 = H, cyano, halo; R2 = cyano, thiocarbamoyl, halo, (substituted) alkyl, alkoxy; R3 = H, amino, NO2, CHO, CO2H, cyano, carbamoyl, thiocarbamoyl, halo, hydroxyiminoalkyl, (substituted) alkyl, alkoxy, alkylthio, alkylsulfinyl, alkylsulfonyl, alkylcarbonyl, alkoxycarbonyl, alkenyl, alkenyloxy, alkenylthio, alkynyl, alkynyloxy, alkynylthio, cycloalkyl, cycloalkylalkyl, cycloalkyloxycarbonyl, Ph, PhCH2; R4, R5 = H, halo, (substituted) alkyl; Z = specified (substituted) triazolyl, pyrazolyl, pyridazinyl, pyrimidinyl, triazinyl, etc.], were prepared Thus, 3-[2-fluoro-4-cyano-5-(1-butyn-3-yloxy)phenyl]-1-amino-6-trifluoromethyl-(1H,3H)-pyrimidin-2,4-dione and PhNEt2 were heated together for 2 h at 210° to give 40% 1-amino-6-trifluoromethyl-3-(6-fluoro-8-cyano-2-methylchromen-3-yl)-(1H,3H)-pyrimidin-2,4-dione. The latter was said to show very strong preemergent herbicidal activity.

IT **325469-33-8P 325469-34-9P**
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of heterocyclylchromenes as herbicides)

RN 325469-33-8 CAPLUS

CN 2H-1-Benzopyran-8-carbonitrile, 6-fluoro-2-methyl-5-[5-methyl-6-oxo-4-(trifluoromethyl)-1(6H)-pyridazinyl]- (9CI) (CA INDEX NAME)



RN 325469-34-9 CAPLUS

CN 2H-1-Benzopyran-8-carbonitrile, 6-fluoro-2-methyl-5-[6-oxo-4-(trifluoromethyl)-1(6H)-pyridazinyl]- (9CI) (CA INDEX NAME)

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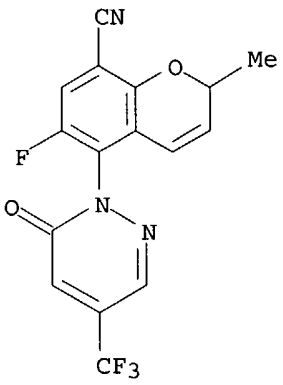
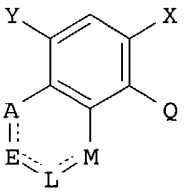


L4 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:175634 CAPLUS
DN 132:190849
TI Preparation of fused benzene derivative herbicides
IN Tsukamoto, Masamitsu; Gupto, Sandeep; Wu, Shao-Yong; Ying, Bai-Ping; Pulman, David A.
PA Ishihara Sangyo Kaisha, Ltd., Japan
SO PCT Int. Appl., 377 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000013508	A1	20000316	WO 1999-US18836	19990903
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 9960187	A1	20000327	AU 1999-60187	19990903
	EP 1111993	A1	20010704	EP 1999-968602	19990903
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	BR 9913503	A	20020129	BR 1999-13503	19990903
	JP 2002524399	T2	20020806	JP 2000-568327	19990903
	US 6573218	B1	20030603	US 2001-786816	20010705
	US 2004029734	A1	20040212	US 2002-301799	20021122
PRAI	US 1998-149296	A2	19980909		
	WO 1999-US18836	W	19990903		
	US 2001-786816	A3	20010705		

OS CASREACT 132:190849; MARPAT 132:190849
GI



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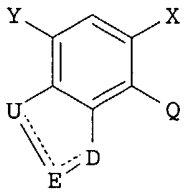


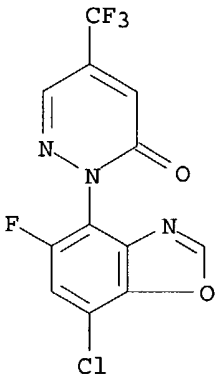
II

AB The fused benzene derivs. I and II [X, Y = H, halo, CN, NO2, etc.; A = O, N, NR1, SOn, C:O, C:S, C(:NR1) etc.; D = N or NR2; M = N, NR2, SOn, C:O, C:S, C(:NR2), etc.; E, L = O, N, C:O, C:S, etc.; U = O, N, NR2, C:O, C:S, C(:NR2), etc.; R1, R2 = H, alkyl, alkenyl, alkynyl, alkylcarbonyl, etc.; n = 0, 1 or 2; Q = (un)substituted heterocyclyl] are prepared as herbicides, such as for corn, soybean or plantation crops. The compds. are also useful as defoliants for potato and cotton.

IT **260253-34-7P 260253-49-4P**
RL: AGR (Agricultural use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation as herbicide)

RN 260253-34-7 CAPLUS

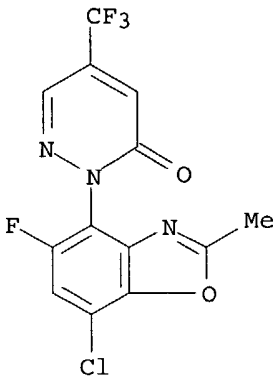
CN 3(2H)-Pyridazinone, 2-(7-chloro-5-fluoro-4-benzoxazolyl)-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



RN 260253-49-4 CAPLUS

CN 3(2H)-Pyridazinone, 2-(7-chloro-5-fluoro-2-methyl-4-benzoxazolyl)-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)

[redacted]



RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:257467 CAPLUS
DN 126:238386
TI Preparation of pyridazin-3-ones as herbicides
IN Katayama, Tadashi; Kawamura, Shinichi; Sanemitsu, Yuzuru; Mine, Yoko
PA Sumitomo Chemical Company, Limited, Japan; Katayama, Tadashi; Kawamura, Shinichi; Sanemitsu, Yuzuru; Mine, Yoko
SO PCT Int. Appl., 343 pp.
CODEN: PIXXD2
DT Patent
LA English

Apps

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
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	AU 9667096	A1	19970312	AU 1996-67096	19960819
	AU 702840	B2	19990304		
	EP 850227	A1	19980701	EP 1996-927192	19960819
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
	CN 1202157	A	19981216	CN 1996-197700	19960819
	CN 1117083	B	20030806		
	BR 9609908	A	19990302	BR 1996-9908	19960819
	NZ 315400	A	20000128	NZ 1996-315400	19960819
	RO 117915	B1	20020930	RO 1998-298	19960819
	IL 123162	A1	20030112	IL 1996-123162	19960819
	IL 144385	A1	20030410	IL 1996-144385	19960819
	ZA 9607069	A	19970221	ZA 1996-7069	19960820
	JP 09323977	A2	19971216	JP 1996-239928	19960820
	US 6090753	A	20000718	US 1998-11269	19980130
	NO 9800720	A	19980421	NO 1998-720	19980220
	US 6348628	B1	20020219	US 2000-521200	20000307
	US 6482773	B1	20021119	US 2002-36528	20020107

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	US 2004005986	A1	20040108	US 2002-263168	20021003
	US 6703503	B2	20040309		
PRAI	JP 1995-236098	A	19950821		
	JP 1996-60232	A	19960221		
	JP 1996-104618	A	19960401		
	IL 1996-123162	A3	19960819		
	WO 1996-JP2311	W	19960819		
	US 1998-11269	A3	19980130		
	US 2000-521200	A3	20000307		
	US 2002-36528	A3	20020107		

OS MARPAT 126:238386

GI

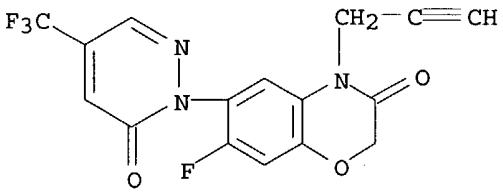
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1 = C1-3 haloalkyl; R2, R3 = H, C1-3 alkyl, C1-3 haloalkyl, C1-3 alkoxyC1-3 alkyl; Q = II, III, IV, V, VI (wherein X = H, halo; Y = halo, NO2, CN, CF3; Z1 = O, S, NH; Z2 = O, S; n = 0-1; B = H, halo, NO2, etc.; R4 = H, C1-3 alkyl; R5 = H, C1-6 alkyl, etc.; R6 = C1-6 alkyl, CN, etc.; R7 = H, C1-6 alkyl; R8 = H, C1-6 alkyl, C1-6 haloalkyl, etc.)], useful as herbicides, were prepared Thus, reaction of 1,1,-dibromo-3,3,3-trifluoroacetone with 7-fluoro-6-hydrazino-4-propargyl-2H-1,4-benzoxazin-3-one in the presence of NaOAc in H2O followed by cyclization of the resulting intermediate VII with carbethoxymethylenetriphenylphosphorane afforded VIII which showed excellent herbicidal activity against Entireleaf morningglory and Velvetleaf at 500 ppm.

IT **188489-03-4P 188489-08-9P 188489-09-0P**
188489-15-8P 188489-18-1P 188489-22-7P
188489-24-9P 188490-45-1P 188490-46-2P
188490-47-3P 188490-48-4P
RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyridazin-3-ones as herbicides)

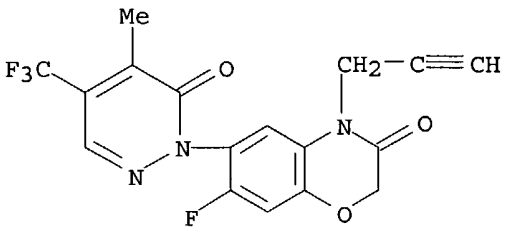
RN 188489-03-4 CAPLUS

CN 2H-1,4-Benzoxazin-3(4H)-one, 7-fluoro-6-[6-oxo-4-(trifluoromethyl)-1(6H)-pyridazinyl]-4-(2-propynyl)- (9CI) (CA INDEX NAME)

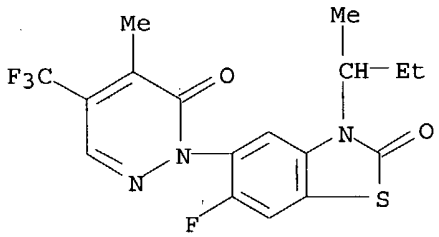


RN 188489-08-9 CAPLUS

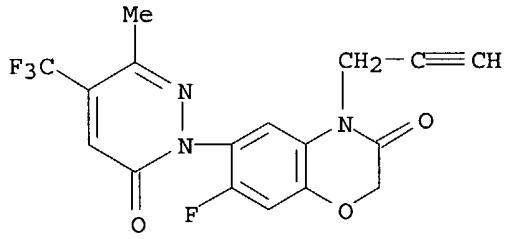
CN 2H-1,4-Benzoxazin-3(4H)-one, 7-fluoro-6-[5-methyl-6-oxo-4-(trifluoromethyl)-1(6H)-pyridazinyl]-4-(2-propynyl)- (9CI) (CA INDEX NAME)



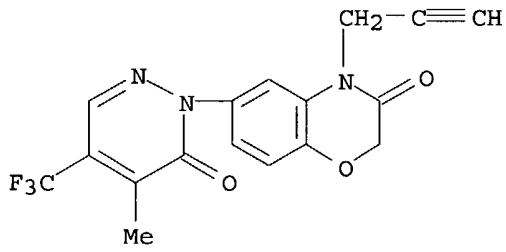
RN 188489-09-0 CAPLUS
CN 2(3H)-Benzothiazolone, 6-fluoro-5-[5-methyl-6-oxo-4-(trifluoromethyl)-1(6H)-pyridazinyl]-3-(1-methylpropyl)- (9CI) (CA INDEX NAME)



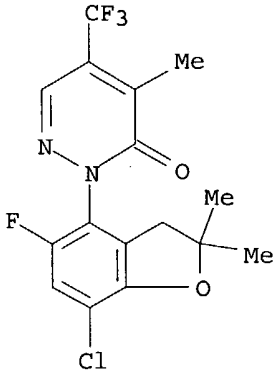
RN 188489-15-8 CAPLUS
CN 2H-1,4-Benzoxazin-3(4H)-one, 7-fluoro-6-[3-methyl-6-oxo-4-(trifluoromethyl)-1(6H)-pyridazinyl]-4-(2-propynyl)- (9CI) (CA INDEX NAME)



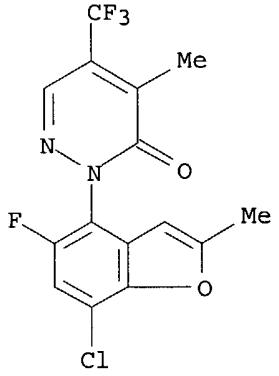
RN 188489-18-1 CAPLUS
CN 2H-1,4-Benzoxazin-3(4H)-one, 6-[5-methyl-6-oxo-4-(trifluoromethyl)-1(6H)-pyridazinyl]-4-(2-propynyl)- (9CI) (CA INDEX NAME)



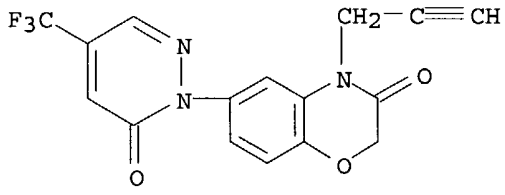
RN 188489-22-7 CAPLUS
CN 3(2H)-Pyridazinone, 2-(7-chloro-5-fluoro-2,3-dihydro-2,2-dimethyl-4-benzofuranyl)-4-methyl-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



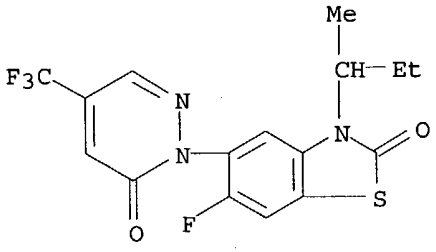
RN 188489-24-9 CAPLUS
CN 3(2H)-Pyridazinone, 2-(7-chloro-5-fluoro-2-methyl-4-benzofuranyl)-4-methyl-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



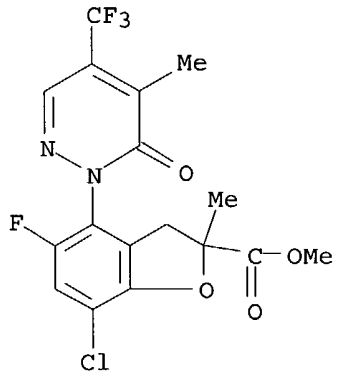
RN 188490-45-1 CAPLUS
CN 2H-1,4-Benzoxazin-3(4H)-one, 6-[6-oxo-4-(trifluoromethyl)-1(6H)-pyridazinyl]-4-(2-propynyl)- (9CI) (CA INDEX NAME)



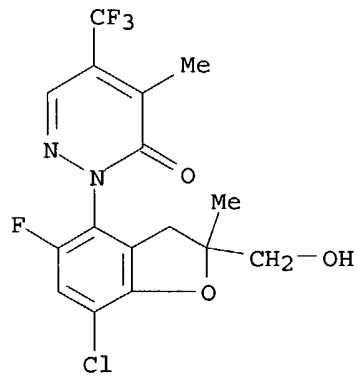
RN 188490-46-2 CAPLUS
CN 2(3H)-Benzothiazolone, 6-fluoro-3-(1-methylpropyl)-5-[6-oxo-4-(trifluoromethyl)-1(6H)-pyridazinyl]- (9CI) (CA INDEX NAME)



RN 188490-47-3 CAPLUS
CN 2-Benzofurancarboxylic acid, 7-chloro-5-fluoro-2,3-dihydro-2-methyl-4-[5-methyl-6-oxo-4-(trifluoromethyl)-1(6H)-pyridazinyl]-, methyl ester (9CI) (CA INDEX NAME)



RN 188490-48-4 CAPLUS
CN 3(2H)-Pyridazinone, 2-[7-chloro-5-fluoro-2,3-dihydro-2-(hydroxymethyl)-2-methyl-4-benzofuranyl]-4-methyl-5-(trifluoromethyl)- (9CI) (CA INDEX NAME)



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COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	25.91	181.54

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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)        SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                   -3.68      -3.68

FILE 'CAOLD' ENTERED AT 11:19:08 ON 12 JUL 2004
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FILE COVERS 1907-1966
FILE LAST UPDATED:  01 May 1997 (19970501/UP)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.  Title keywords, authors, patent
  assignees, and patent information, e.g., patent numbers, are
  now searchable from 1907-1966.  TIFF images of CA abstracts
  printed between 1907-1966 are available in the PAGE
  display formats.

  This file supports REG1stRY for direct browsing and searching of
  all substance data from the REGISTRY file.  Enter HELP FIRST for
  more information.

=> d his

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L2            0 S L1
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     FILE 'CAOLD' ENTERED AT 11:19:08 ON 12 JUL 2004

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L5            0 L3

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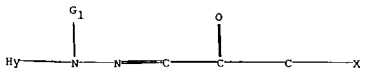

Part II

Bruce Avery (NP)

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chain bonds :
1-2 1-4 1-9 2-3 3-5 5-6 5-7 7-8
exact/norm bonds :
1-2 1-4 1-9 2-3 5-6
exact bonds :
3-5 5-7 7-8

G1:H,CH3

Match level :
1:CLASS 2:CLASS 3:CLASS 4:Atom 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
Generic attributes :
4:
Saturation : Unsaturated
Number of Carbon Atoms : 7 or more
Type of Ring System : Polycyclic

10/773231

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=> s l1 sss full
FULL SEARCH INITIATED 12:24:37 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   2902 TO ITERATE

100.0% PROCESSED    2902 ITERATIONS                          25 ANSWERS
SEARCH TIME: 00.00.01

L3           25 SEA SSS FUL L1

=> file caplus
COST IN U.S. DOLLARS                          SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                               160.22     162.74

FILE 'CAPLUS' ENTERED AT 12:24:42 ON 12 JUL 2004
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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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FILE COVERS 1907 - 12 Jul 2004  VOL 141 ISS 3
FILE LAST UPDATED: 11 Jul 2004  (20040711/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.


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L4            8 L3

=> d l4 1-8 bib abs hitstr
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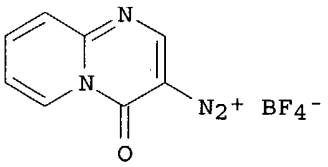
L4 ANSWER 1 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2003:85532 CAPLUS
DN 139:307735
TI Synthetic applications of some heteroaryl diazonium salts, azides, and similar compounds: ring contraction, rearrangements and other interesting reactions
AU Recnik, Simon; Svete, Jurij
CS Fak. Kem. Kem. Tehnol., Univerza Ljubljana, Ljubljana, Slovenia
SO Zbornik Referatov s Posvetovanja Slovenski Kemijski Dnevi, Maribor, Slovenia, Sept. 26-27, 2002 (2002), Issue Part 1, 211-214. Editor(s): Glavic, Peter; Brodnjak-Voncina, Darinka. Publisher: Univerza v Mariboru, Fakulteta za Kemijo in Kemijsko Tehnologijo, Maribor, Slovenia. CODEN: 69DNMZ; ISBN: 86-435-0491-2
DT Conference
LA Slovenian
GI



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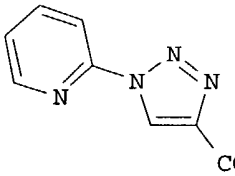

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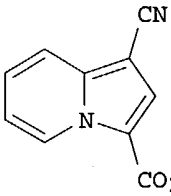

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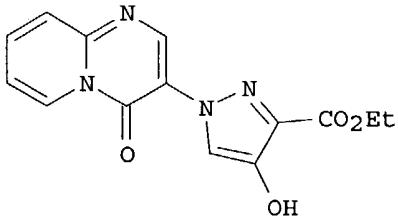
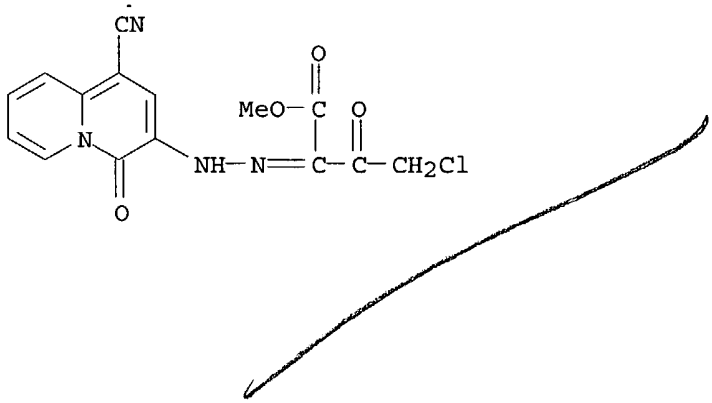


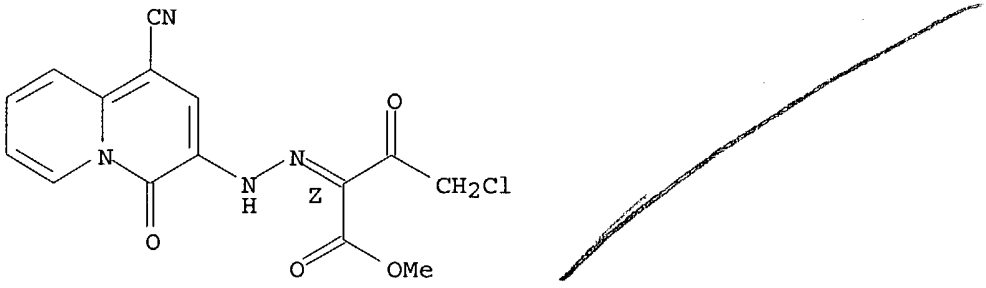
IV

AB A series of heteroaryl diazonium salts derived in high yields from dimethylamino propenoates, e.g. 4-oxoquinolizine-3-diazonium tetrafluoroborate I, its aza analogs and 3-azido derivs., were developed as highly versatile and efficient precursors in the synthesis of several heterocyclic systems. Alkyl 1-heteroaryl-1H-1,2,3-triazole-4-carboxylates, e.g. II, were prepared by heterocycle interconversion of these diazonium salts in MeOH or EtOH, whereas 1-substituted indolizine-3-carboxylates, e.g. III, were formed in a novel aza-Wolff rearrangement. Condensation of I with 1,3-diketones, such as Me 4-chloroacetoacetate, afforded the corresponding diketo hydrazones, which underwent thermal cyclization to give regioselectively 1-heteroaryl-1H-pyrazoles, e.g. IV. Reactions of I with aliphatic secondary amines gave the corresponding triazenes; however, treatment with primary amine resulted in pyrimidine ring opening.
IT **329359-15-1P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of various heterocyclic systems via azidation, alkylation, ring contraction and rearrangement reactions of heteroaryl diazonium salts)
RN 329359-15-1 CAPLUS
CN Butanoic acid, 4-chloro-2-[(1-cyano-4-oxo-4H-quinolizin-3-yl)hydrazono]-3-oxo-, methyl ester (9CI) (CA INDEX NAME)



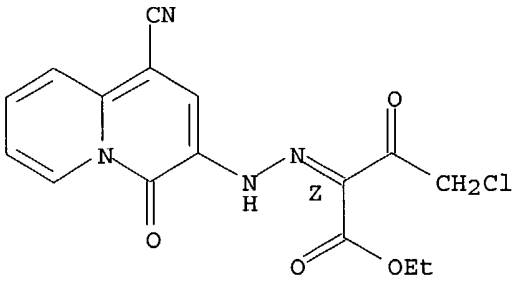
L4 ANSWER 2 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2002:858445 CAPLUS
DN 138:238117
TI Coupling of heteroaryldiazonium tetrafluoroborates with 1,3-dicarbonyl compounds - regioselective synthesis of alkyl 1-heteroaryl-4-hydroxy-1H-pyrazole-3-carboxylates
AU Recnik, Simon; Svete, Jurij; Stanovnik, Branko
CS Faculty of Chemistry and Chemical Technology, University of Ljubljana, Ljubljana, 1000, Slovenia
SO Heterocycles (2002), 57(11), 2091-2106
CODEN: HTCYAM; ISSN: 0385-5414
PB Japan Institute of Heterocyclic Chemistry
DT Journal
LA English
OS CASREACT 138:238117
AB Coupling of 1-cyano-4-oxo-4H-quinolizine-, 1-ethoxycarbonyl-4-oxo-4H-quinolizine-, and 4-oxo-4H-pyridino[1,2-b]pyrimidine-3-diazonium tetrafluoroborates with 1,3-dicarbonyl compds. afforded the corresponding hydrazones in 55-96% yields. The orientation around the C:N double bond in unsym. substituted hydrazones was determined by NMR (NOESY) spectrometry. Heating of some hydrazones, derived from alkyl 4-chloro-3-oxobutanoates, furnished 1-(1-substituted quinolizin-3-yl)- and 1-(pyridino[1,2-a]-pyrimidin-3-yl)-4-hydroxy-1H-pyrazole-3-carboxylates in 87-96% yields.
IT **501347-67-7P 501347-68-8P 501347-73-5P**
501347-74-6P 501347-75-7P 501347-76-8P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(coupling of heteroaryldiazonium tetrafluoroborates with 1,3-dicarbonyl compds.)
RN 501347-67-7 CAPLUS
CN Butanoic acid, 4-chloro-2-[(1-cyano-4-oxo-4H-quinolizin-3-yl)hydrazono]-3-oxo-, methyl ester, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



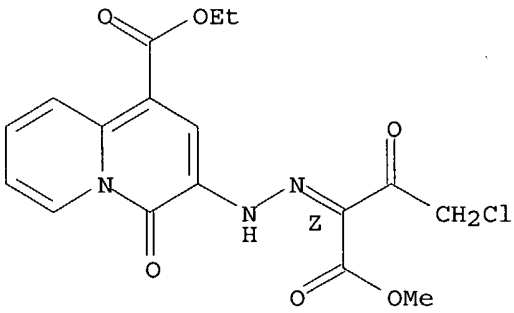
RN 501347-68-8 CAPLUS
CN Butanoic acid, 4-chloro-2-[(1-cyano-4-oxo-4H-quinolizin-3-yl)hydrazono]-3-oxo-, ethyl ester, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



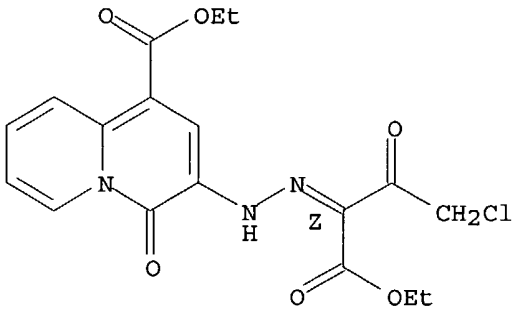
RN 501347-73-5 CAPLUS
CN 4H-Quinolizine-1-carboxylic acid, 3-[(2Z)-[3-chloro-1-(methoxycarbonyl)-2-oxopropylidene]hydrazino]-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



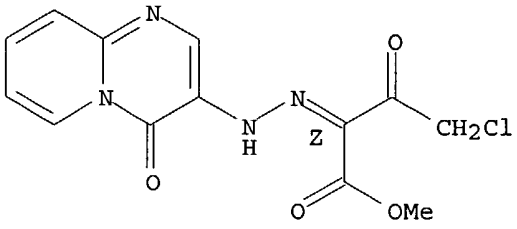
RN 501347-74-6 CAPLUS
CN 4H-Quinolizine-1-carboxylic acid, 3-[(2Z)-[3-chloro-1-(ethoxycarbonyl)-2-oxopropylidene]hydrazino]-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.



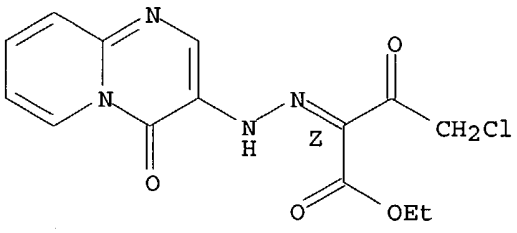
RN 501347-75-7 CAPLUS
CN Butanoic acid, 4-chloro-3-oxo-2-[(4-oxo-4H-pyrido[1,2-a]pyrimidin-3-yl)hydrazono]-, methyl ester, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



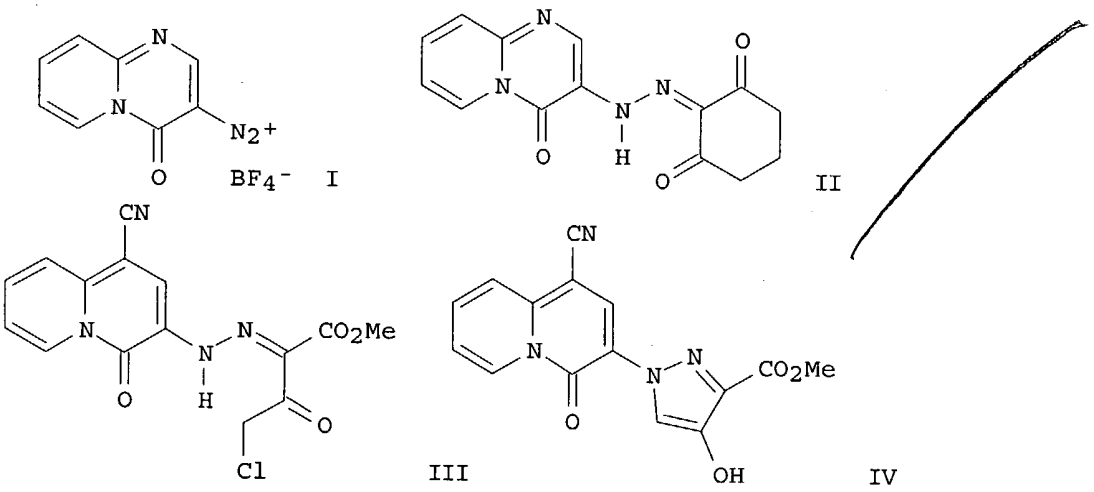
RN 501347-76-8 CAPLUS
CN Butanoic acid, 4-chloro-3-oxo-2-[(4-oxo-4H-pyrido[1,2-a]pyrimidin-3-yl)hydrazono]-, ethyl ester, (2Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 2000:783539 CAPLUS
DN 134:222683
TI Hydrazones of some heterocyclic systems as intermediates in the synthesis of bi(hetero)aryl derivatives
AU Recnik, Simon; Svete, Jurij; Stanovnik, Branko
CS Fak. za Kemijo in Kemijsko Tehnol., Univ. v Ljubljani, Ljubljana, 1000, Slovenia
SO Zbornik Referatov s Posvetovanja Slovenski Kemijski Dnevi, Maribor, Slovenia, Sept. 28-29, 2000 (2000), Meeting Date 2000, Issue Pt. 1, 131-136. Editor(s): Glavic, Peter; Brodnjak-Voncina, Darinka. Publisher: Univerza v Mariboru, Fakulteta za Kemijo in Kemijsko Tehnologijo, Maribor, Slovenia.
CODEN: 69AOXY
DT Conference
LA Slovenian
OS CASREACT 134:222683
GI

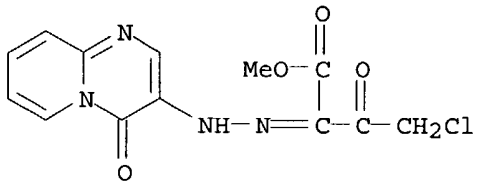


AB The synthetic utility of stable heterocyclic diazonium tetrafluoroborates was studied. Thus, diazonium salts, e.g. pyridopyrimidinone derivative I, reacted with active methylene compds., e.g. acetylacetone, to give hydrazones, e.g. II, via Japp-Klingemann reaction. In this manner, several heterocyclic hydrazones of the pyridinopyrimidine and quinolizine ring systems were prepared If the hydrazone moiety incorporates a leaving group such as ester or halogen at an appropriate distance, e.g. III, cyclization can occur to give biheteroaryl derivs., e.g. IV. In this manner, 1-heteroarylpyridazines and 1-heteroaryl-4-hydroxy-1H-pyrazole-3-carboxylates were prepared These cyclizations were induced by thermal or alkaline catalyzed condensations.

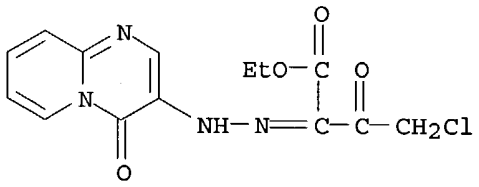
IT **329359-10-6P 329359-11-7P 329359-15-1P**
329359-16-2P 329359-17-3P 329359-18-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of biheteroaryl compds. via Japp-Klingemann reactions of heteroarom. diazonium salts and cyclocondensation of heteroaryl hydrazones)

RN 329359-10-6 CAPLUS
CN Butanoic acid, 4-chloro-3-oxo-2-[(4-oxo-4H-pyrido[1,2-a]pyrimidin-3-

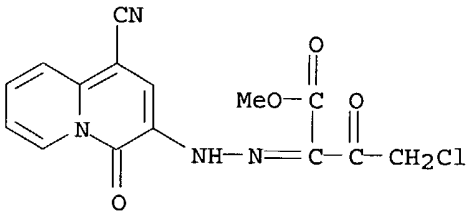
yl)hydrazono]-, methyl ester (9CI) (CA INDEX NAME)



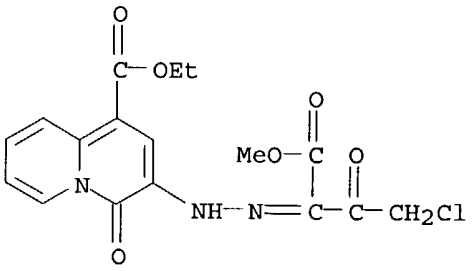
RN 329359-11-7 CAPLUS
CN Butanoic acid, 4-chloro-3-oxo-2-[(4-oxo-4H-pyrido[1,2-a]pyrimidin-3-yl)hydrazono]-, ethyl ester (9CI) (CA INDEX NAME)



RN 329359-15-1 CAPLUS
CN Butanoic acid, 4-chloro-2-[(1-cyano-4-oxo-4H-quinolizin-3-yl)hydrazono]-3-oxo-, methyl ester (9CI) (CA INDEX NAME)

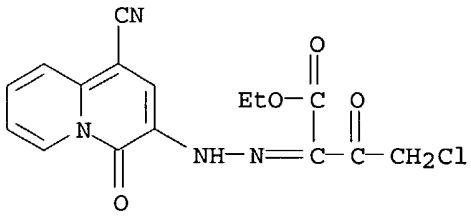


RN 329359-16-2 CAPLUS
CN 4H-Quinolizine-1-carboxylic acid, 3-[[3-chloro-1-(methoxycarbonyl)-2-oxopropylidene]hydrazino]-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)

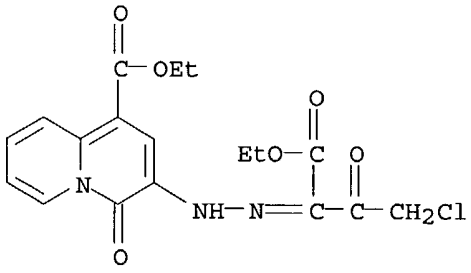


RN 329359-17-3 CAPLUS
CN Butanoic acid, 4-chloro-2-[(1-cyano-4-oxo-4H-quinolizin-3-yl)hydrazono]-3-

oxo-, ethyl ester (9CI) (CA INDEX NAME)



RN 329359-18-4 CAPLUS
CN 4H-Quinolizine-1-carboxylic acid, 3-[[3-chloro-1-(ethoxycarbonyl)-2-oxopropylidene]hydrazino]-4-oxo-, ethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 4 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1997:257467 CAPLUS
DN 126:238386
TI Preparation of pyridazin-3-ones as herbicides
IN Katayama, Tadashi; Kawamura, Shinichi; Sanemitsu, Yuzuru; Mine, Yoko
PA Sumitomo Chemical Company, Limited, Japan; Katayama, Tadashi; Kawamura, Shinichi; Sanemitsu, Yuzuru; Mine, Yoko
SO PCT Int. Appl., 343 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9707104	A1	19970227	WO 1996-JP2311	19960819
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, KE, KG, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
	CA 2230199	AA	19970227	CA 1996-2230199	19960819
	AU 9667096	A1	19970312	AU 1996-67096	19960819
	AU 702840	B2	19990304		
	EP 850227	A1	19980701	EP 1996-927192	19960819
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
	CN 1202157	A	19981216	CN 1996-197700	19960819
	CN 1117083	B	20030806		
	BR 9609908	A	19990302	BR 1996-9908	19960819
	NZ 315400	A	20000128	NZ 1996-315400	19960819
	RO 117915	B1	20020930	RO 1998-298	19960819
	IL 123162	A1	20030112	IL 1996-123162	19960819
	IL 144385	A1	20030410	IL 1996-144385	19960819
	ZA 9607069	A	19970221	ZA 1996-7069	19960820
	JP 09323977	A2	19971216	JP 1996-239928	19960820
	US 6090753	A	20000718	US 1998-11269	19980130
	NO 9800720	A	19980421	NO 1998-720	19980220
	US 6348628	B1	20020219	US 2000-521200	20000307
	US 6482773	B1	20021119	US 2002-36528	20020107
	US 2004005986	A1	20040108	US 2002-263168	20021003
	US 6703503	B2	20040309		
PRAI	JP 1995-236098	A	19950821		
	JP 1996-60232	A	19960221		
	JP 1996-104618	A	19960401		
	IL 1996-123162	A3	19960819		
	WO 1996-JP2311	W	19960819		
	US 1998-11269	A3	19980130		
	US 2000-521200	A3	20000307		
	US 2002-36528	A3	20020107		

OS MARPAT 126:238386
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1 = C1-3 haloalkyl; R2, R3 = H, C1-3 alkyl, C1-3 haloalkyl, C1-3 alkoxyC1-3 alkyl; Q = II, III, IV, V, VI (wherein X = H,

halo; Y = halo, NO2, CN, CF3; Z1 = O, S, NH; Z2 = O, S; n = 0-1; B = H, halo, NO2, etc.; R4 = H, C1-3 alkyl; R5 = H, C1-6 alkyl, etc.; R6 = C1-6 alkyl, CN, etc.; R7 = H, C1-6 alkyl; R8 = H, C1-6 alkyl, C1-6 haloalkyl, etc.)], useful as herbicides, were prepared Thus, reaction of 1,1,-dibromo-3,3,3-trifluoroacetone with 7-fluoro-6-hydrazino-4-propargyl-2H-1,4-benzoxazin-3-one in the presence of NaOAc in H2O followed by cyclization of the resulting intermediate VII with carbethoxymethylenetriphenylphosphorane afforded VIII which showed excellent herbicidal activity against Entireleaf morningglory and Velvetleaf at 500 ppm.

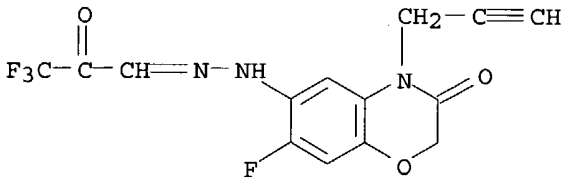
IT **188490-50-8P 188490-51-9P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of pyridazin-3-ones as herbicides)

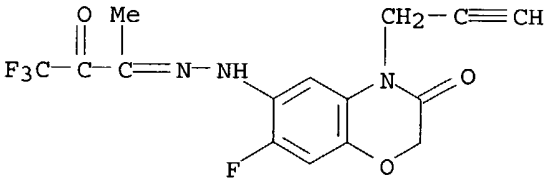
RN 188490-50-8 CAPLUS

CN Propanal, 3,3,3-trifluoro-2-oxo-, 1-[[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]hydrazone] (9CI) (CA INDEX NAME)



RN 188490-51-9 CAPLUS

CN 2,3-Butanedione, 1,1,1-trifluoro-, 3-[[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2H-1,4-benzoxazin-6-yl]hydrazone] (9CI) (CA INDEX NAME)



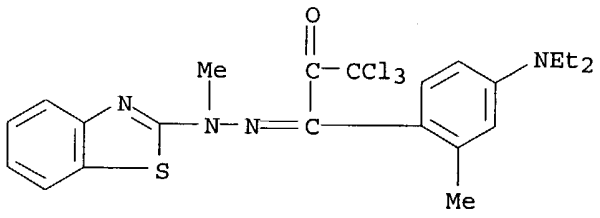
L4 ANSWER 5 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1987:587337 CAPLUS
DN 107:187337
TI Electrophotographic photoreceptor
IN Ehashi, Shigeyuki; Suda, Yasumasa; Sakamoto, Mare
PA Toyo Ink Mfg. Co., Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI JP 62050765	A2	19870305	JP 1985-189691	19850830
PRAI JP 1985-189691		19850830		

AB The title electrophotog. photoreceptor has a photosensitive layer containing ≥1 hydrazone RC(COR1):NNR2R3 [I; R = aromatic carbocyclyl, heterocyclyl; R1 = alkyl, aralkyl, aryl; R2, R3 = alkyl, aralkyl, aryl, heterocyclyl]. The photoreceptor has high photosensitivity, high environmental stability, and excellent durability. Thus, a composition containing a concentrated H2SO4 solution of Cu phthalocyanine and tetranitrocopper phthalocyanine was mixed with I (R = N-ethylcarbazyl-3; R1 = CF3; R2 = Me; R3 = Ph), Takelac A-702 (acryl polyol), Epon 1007 (epoxy resin), MEK, and cellosolve acetate and kneaded for 48 h. This composition was coated on an Al-laminated polyester film to give a 2-μm layer. The obtained photoreceptor, upon charging to 670 V, showed a dark decay of 16% after 10 s, exposure required for half decay of voltage 2.8 lx-s, and residual potential 22 V. Consecutive cycles provided 10,000 clear copies without variation in sensitivity.

IT **110968-02-0P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and use of, as charge-transfer agent in electrophotog. photoconductor)

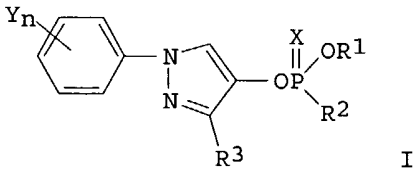
RN 110968-02-0 CAPLUS
CN 1,2-Propanedione, 3,3,3-trichloro-1-[4-(diethylamino)-2-methylphenyl]-, 1-(2-benzothiazolylmethylhydrazone) (9CI) (CA INDEX NAME)



L4 ANSWER 6 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1985:204103 CAPLUS
DN 102:204103
TI Pyrazol-4-yl phosphates
IN Okada, Yoshiyuki; Sato, Yasuo
PA Takeda Chemical Industries, Ltd. , Japan
SO Can., 52 pp.
CODEN: CAXXA4
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CA 1177081	A1	19841030	CA 1981-385787	19810914
PRAI CA 1981-385787		19810914		

GI

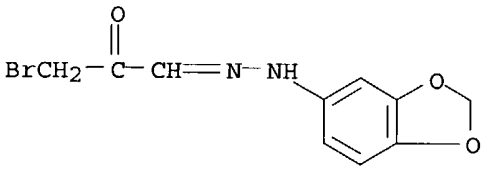


I

AB About 43 title compds. I (R1 = alkyl; R2 = alkoxy, alkylthio; R3 = H, alkoxycarbonyl; X = O, S; Y = alkyl, alkoxy, alkylthio, halo, NO2, CF3; n = 0, 1, 2, 3; Yn = alkylidenedioxy containing 1-3 C atoms), insecticides, were prepared Thus, 3-chloropyruvaldehyde 4-chlorophenylhydrazone was cyclized with MeOH/NaOH to give 1-(4-chlorophenyl)-4-hydroxypyrazole. The last was treated with EtOP(O)(SPr)Cl in the presence of Et3N to give I (Yn = 4-Cl; R3 = H; R1 = Et; R2 = SPr; X = O) (II). At 40 ppm, II gave 97% kill of Laodelphax striatellus after 24 h.

IT **77458-70-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and cyclization of)

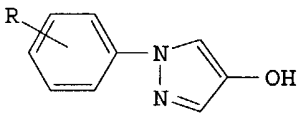
RN 77458-70-9 CAPLUS
CN Propanal, 3-bromo-2-oxo-, 1-(1,3-benzodioxol-5-ylhydrazone) (9CI) (CA INDEX NAME)



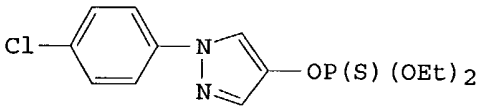
L4 ANSWER 7 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1984:551842 CAPLUS
DN 101:151842
TI Hydroxypyrazoles
PA Takeda Chemical Industries, Ltd., Japan
SO Jpn. Kokai Tokkyo Koho, 10 pp.
CODEN: JKXXAF
DT Patent
LA Japanese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 59112970	A2	19840629	JP 1983-185315	19831003
	JP 63037101	B4	19880722		
PRAI	JP 1983-185315		19831003		

GI



I

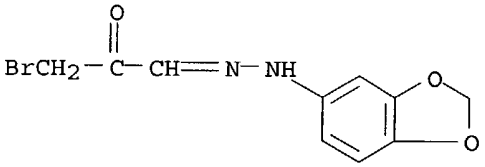


II

AB Title compds. I (R = alkyl, alkoxy, alkylthio, halo, NO2, CF3, alkylenedioxy) were prepared Thus, treating 9.3 g 4-ClC6H4NHN:CHCOCH2Cl with 4.0 g NaOH in MeOH gave 6.4 g pyrazole I (R = 4-Cl). The latter was converted to insecticidal and acaricidal thiophosphate II.

IT **77458-70-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and cyclization of, pyrazole from)

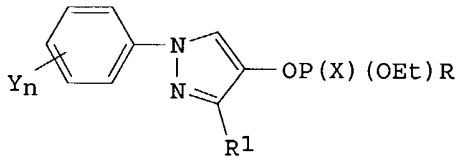
RN 77458-70-9 CAPLUS
CN Propanal, 3-bromo-2-oxo-, 1-(1,3-benzodioxol-5-ylhydrazone) (9CI) (CA INDEX NAME)



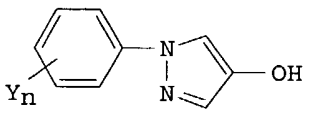
L4 ANSWER 8 OF 8 CAPLUS COPYRIGHT 2004 ACS on STN
AN 1981:192323 CAPLUS
DN 94:192323
TI Pyrazolyl phosphate esters
IN Okada, Yoshiyuki; Sato, Yasuo
PA Takeda Chemical Industries, Ltd., Japan
SO Ger. Offen., 37 pp.
CODEN: GWXXBX
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	DE 3012193	A1	19801009	DE 1980-3012193	19800328
	DE 3012193	C2	19891214		
	JP 55130991	A2	19801011	JP 1979-38957	19790330
	JP 60055075	B4	19851203		
	IL 59601	A1	19840930	IL 1980-59601	19800312
	FR 2452493	A1	19801024	FR 1980-6849	19800327
	FR 2452493	B1	19850614		
	BR 8001838	A	19801118	BR 1980-1838	19800327
	GB 2047250	A	19801126	GB 1980-10546	19800328
	HU 29282	O	19840130	HU 1980-738	19800328
	HU 186365	B	19850729		
	CH 648563	A	19850329	CH 1980-2482	19800328
	US 4474775	A	19841002	US 1983-511296	19830706
	US 4621144	A	19861104	US 1984-627728	19840703
PRAI	JP 1979-38957		19790330		
	US 1980-136460		19800331		
	US 1981-304258		19810914		
	US 1983-511296		19830706		

OS CASREACT 94:192323
GI



I

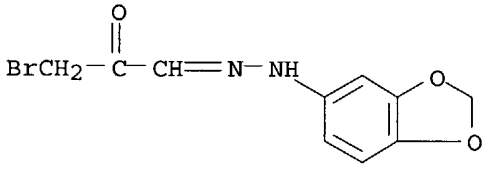


II

AB Forty-three title compds. (I; R = alkoxy, alkylthio; R1 = H, CO2Et; X = O, S; Y = alkyl, alkylthio, halo, NO2, CF3; n = 0-3) were prepared by cyclizing ZCH2COCH:NNHC6H5-nYn (Z = halo) to give II, which was esterified with R(EtO)P(X)Z. Thus, cyclization of 9.3 g ClCH2COCH:NNHC6H4Cl-p with 4 g NaOH in 50 mL MeOH gave 6.4 g II (Y = p-Cl), which (3.9 g), with 2 g Et3N and 4 g PrS(EtO)P(S)Cl was heated 3 h at 50° in 60 mL MeCN to give 5.2 g I (R = PrS, R1 = H, Y = p-Cl, X = S) (III). Extensive data were given for the effectiveness of I as insecticides and acaricides. E.g., at 500 ppm III gave 100% kill of Spodoptera litura.

IT **77458-70-9P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and cyclization of, pyrazole by)

RN 77458-70-9 CAPLUS
CN Propanal, 3-bromo-2-oxo-, 1-(1,3-benzodioxol-5-ylhydrazone) (9CI) (CA INDEX NAME)



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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
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L2            2 S L1
L3           25 S L1 SSS FULL

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L4            8 S L3

     FILE 'CAOLD' ENTERED AT 12:25:39 ON 12 JUL 2004

=> s l3
L5            0 L3

=> log h
COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
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DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)              SINCE FILE      TOTAL
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